

PRACTICE PROJECTILE WITH SMOKE SIGNATURE

ABSTRACT OF THE INVENTION

5 A new projectile design for the M224 Mortar gun system that is
ballistically similar to the M720 high explosive mortar cartridge. The present
design compensates for the realistic hands-on practice cartridges, and
allows for the release of flame or smoke and bang upon impact to
simulate a successful deployment of the tactical cartridge. The projectile
10 design not only balances the weight deficiency due to the removal of the
explosive fills, but also improves conventional method of releasing a
smoke signature as in other full and short range practice cartridges. The
projectile includes three main components: a center vent tube, a plurality
of vent holes, and a plurality of vent plugs. The center vent tube
15 compensates for the physical properties of the tactical mortar cartridge
and provides a passage for an efficient release of smoke upon a fuze
function. The vent holes are positioned at the rear end of the projectile
body to sufficiently release pressure, flame and smoke upon a fuze
function. The vent plugs seal the vent holes to protect the interior of the
20 projectile during storage, handling, and launching.